

## CLAIMS:

1. A method for address conversion in a network with at least two appliances that use different kinds of addressing methods, wherein a first address from a first addressing method is converted into a second address from a second addressing method as follows:
  - positions of the addresses at which all addresses of the second addressing
  - 5 method that are in use each exhibit at least one identical character are determined, and the character is designated a common character,
  - an arbitrary amendment is made to at least one common character,
  - the second address is formed from the common, amended characters and at least multiple characters from the first address,
  - 10 - the common characters within the second address occur in the same positions as in all other addresses of the second addressing method.
2. A method as claimed in claim 1, characterized in that unoccupied positions from the second address are occupied by arbitrary filler characters.
- 15 3. A method as claimed in claim 2, characterized in that the filler characters are used for specifying additional information.
4. A method as claimed in claim 1, characterized in that the characters of the
- 20 addresses are binary characters.
5. A method as claimed in claim 4, characterized in that an XOR function is executed to determine identical binary characters.
- 25 6. A method as claimed in claim 4, characterized in that an inversion is used to amend the binary characters.

7. A communications device for connecting networks of the same and different kinds with different addressing methods, which device converts a first address from a first addressing method into a second address from a second addressing method as follows:

- 5 - positions of the addresses at which all addresses of the second addressing method that are in use each exhibit at least one identical character are determined, and the character is designated a common character,
- an arbitrary amendment is made to at least one common character,
- the second address is formed from the common, amended characters and at least multiple characters from the first address, wherein the common characters within the  
10 second address occur in the same positions as in all other addresses of the second addressing method.

8. A network with at least two appliances, which use different addressing methods, wherein a first address from a first addressing method is converted into a second  
15 address from a second addressing method as follows:

- positions of the addresses at which all addresses of the second addressing method that are in use each exhibit at least one identical character are determined, and the character is designated a common character,
- an arbitrary amendment is made to at least one common character,
- 20 - the second address is formed from the common, amended characters and at least multiple characters from the first address, and the common characters within the second address occur in the same positions as in all other addresses of the second addressing method.